

IN THE CLAIMS

Page 5, line 1, change "Patent Claims" to --What is claimed is--.

Cancel claims 1-11 and add new claims 12-21, reading as follows:

12. (New) An arrangement for the detection of fluorescent light comprising:
at least one imaging microscope unit;
at least one device component for analyzing molecular interactions in small
volumes;

imaging method means for determining and selecting measurement locations for
the analysis of molecular interaction in at least two dimensions;

a shared control unit for operating the imaging microscope unit and the device
components; and

said control unit and a computer for graphically depicting at least the analysis
results of the device components.

13. (New) The arrangement according to claim 12, wherein the analysis
results are correlated with the image of the imaging microscope unit.

14. (New) The arrangement according to claim 12, wherein the analysis of
molecular interactions is carried out by fluorescence correlation spectroscopy (FCS) and the unit
for imaging is based on the principle of laser scanning microscopy.

15. (New) The arrangement according to claim 12, wherein the selection of
the specimen location for FCS measurement is carried out manually and/or automatically by a
movable specimen table and/or vertical adjustment of the objective.

16. (New) The arrangement according to claim 12, wherein the selection of
the specimen location is carried out manually and/or automatically for the FCS measurement by
at least one scanner.

17. (New) The arrangement for detecting the light coming from an illuminated specimen according to claim 12, comprising a laser scanning microscope (LSM) and an arrangement which is coupled into the illumination beam path of the LSM between the scanner of the LSM and the specimen for excitation and detection by FCS via a shared evaluation unit.

18. (New) The arrangement for detecting the light coming from an illuminated specimen according to claim 12, comprising a laser scanning microscope (LSM), wherein, besides LSM detectors, additional detectors are arranged following the scanner of the LSM in the detection direction for detecting FCS signals and/or the operating mode of the LSM detectors is switched to FCS evaluation by a shared control unit.

19. (New) A method for detecting the light coming from an illuminated specimen according to claim 12, comprising the steps of:

scanning the specimen by illumination light from point to point at least in two dimensions;

detecting light coming from the specimen via at least a first detector; and

carrying out an FCS evaluation during the scanning process and/or after the scanning process for at least one specimen point.

20. (New) The method according to claim 19, wherein the value detected during scanning and at least one value detected in the FCS evaluation are stored and allocated in the storage for at least one specimen point.

21. (New) The method according to claim 19, wherein the preceding method steps are carried out for a plurality of specimen points which are preselected automatically and/or manually.

22. (New). The method according to claim 19, including providing for shared graphic depiction of the values determined during scanning and during the FCS evaluation.